Attorney Docket: 2775/105 Application 10/723,030

Response to Office Action of June 9, 2009

The Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1.-5. (Canceled)

6. (Currently amended) Radiotherapy apparatus comprising:

a two-dimensional imager responsive to imaging radiation and generating a two-

dimensional imaging output;

computing means for processing the imaging output to produce tomography data

including a plurality of intersecting sectional views intersecting substantially at the isocenter of

the therapeutic source, each sectional view being an image containing pixels with values derived

from averaging a plurality of voxels in the tomography dataset which are disposed transverse to

the corresponding section; and

a therapeutic source controllable in response to feedback from the tomography data and

producing therapeutic radiation.

7. (Previously presented) Radiotherapy apparatus according to claim 6 in which the plurality of

voxels are disposed orthogonal to the corresponding section.

8. (Original) Radiotherapy apparatus according to claim 6 in which the plurality of voxels are

disposed linearly.

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 (Previously presented) Radiotherapy apparatus according to claim 6 in which between 5 and 20 yoxels are employed.

10. (Previously presented) Radiotherapy apparatus according to claim 6 in which between 7 and 15 yoxels are employed.

11. (Previously presented) Radiotherapy apparatus according to claim 6 in which about 10 voxels are employed.

12. (Previously presented) Radiotherapy apparatus according to claim 6 in which there is a display means for showing the sectional views.

13. (Original) Radiotherapy apparatus according to claim 12 in which the therapeutic source is controlled on the basis of instructions from an operator, given via an input means.

14. (Previously presented) Radiotherapy apparatus according to claim 13 in which the input means is correlated to the display means.

15. (Previously presented) Radiotherapy apparatus according to claim 14 in which the correlation is via a superimposed image on the display means which is moveable in response to operation of the input means. Attorney Docket: 2775/105 Application 10/723,030

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16. (Original) Radiotherapy apparatus according to claim 15 in which the superimposed image is

derived from one of a previous investigation and a treatment of the patient.

17. (Original) Radiotherapy apparatus according to claim 15 in which the superimposed image is

an outline.

18. (Previously presented) Radiotherapy apparatus according to claim 6, in which the sectional

views are arranged orthogonally.

19. (Previously presented) Radiotherapy apparatus according to claim 6, in which at least three

sectional views are prepared.

20. (Canceled)

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